

From Risk to Resilience: Promoting School–Health Partnerships for Children

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ABSTRACT: Across the globe, educational and health practitioners wrestle daily with the paradoxes of risk and resilience. Though the causes of risk are generally outside the control of professionals, manifestations of disadvantage directly affect service delivery and the realizing of accountability benchmarks. This article proposes a shift in attention from risk to resilience as being empowering and proactive for students and those vested in maximizing their potential. Given that resilience has been deemed an ecological phenomenon, the ecology of human development framework posited by Uri Bronfenbrenner (1979) was applied to advance the rationale for resiliency partnerships between schools and school-based health clinics.



Poverty can create risk in every dimension of a child's life. Impoverished youngsters around the world are more apt to be born underweight and to be malnourished, as well as susceptible to disease and environmental toxins. Furthermore, implications of these poverty markers do not disappear after birth or early childhood but rather persist into adulthood (Borman & Overman, 2004; Guo & Harris, 2000; Jenson, 2007; Richardson, 2006). Lest the focus on child poverty and the risk it creates target emerging nations alone, it is important to remember that citizen status in wealthy nations such as the United States does little to protect youngsters from economic disadvantage, particularly if they belong to racial and ethnic minorities. Whether residing in developed or emerging nations, babies and youth are subjected to a toxic risk cocktail if they are poor, by their nation's definition. In and of itself, the term *poor* is relative and contextual. For purposes of this article, the word refers to family resources that are insufficient to ensure adequate housing, health, and educational opportunities undergirding optimal child development.

Volumes have been written about economic deprivation and risk. Far fewer have concentrated on resilience as a framework for child health and educational interventions; however, this focus is changing. As an example of paradigmatic shifts UNICEF (United Nation's Children's Fund) deems child survival as being dependent on integrated approaches to ensure child

well-being. Especially in impoverished communities, it is imperative that essential services be packaged as a matter of efficiency, cost-saving, and effectiveness. Furthermore, partnerships need to reflect community priorities and so create a strategic continuum of care for youngsters (UNICEF, 2005).

A model espoused by UNICEF, UNESCO (United Nations Educational, Scientific, and Cultural Organization), and other organizations to mitigate risk and promote resilience involves the use of schools as the site for health care delivery. In a U.S. context, a collaboration that holds great potential in the quest to optimize childhood intellect and wellness involves schools and school-based health centers (SBHCs) or school-linked health facilities. This article considers the efficacy of programmatic and policy collaborations between education and health professionals that are designed to facilitate resilience in youngsters, as opposed to focusing singularly on risk, primarily in the United States. That said, the rationale for such partnerships has merit because many nations seek to provide for impoverished children.

At the heart of the childhood risk and resilience puzzle is the inability to come to consensus about comprehensive definitions of both terms; formulae that could be applied to predict successful interventions designed to mitigate risk and facilitate resilience; and the role of institutional partnerships in the quest to protect and enhance childhood potential. In addition, strategic partnerships and program collaboration are sorely lacking given that programs often function in disciplinary silos (Jenson, 2007; Jenson & Fraser, 2006).

Uncontested is the impact that stressors associated with child poverty create for health and learning, which can persist into adulthood and hinder educational attainment, thereby presenting another benefit for school-health alliances (Freudenberg & Ruglis, 2007; Halterman et al., 2001; Richardson, 2006). Because economically challenged families do not command the resources to completely mitigate problems linked to childhood poverty, they are in the greatest need of targeted government and nongovernmental organization interventions.

The sheer numbers of poor and near-poor children in the United States provides sufficient impetus to consider their plight across developed and emerging nations. Specifically, 63% of American Indian children, 61% of Latino children, 60% of Black children, 27% of Asian children, and 26% of White children are supported by poor and near-poor families. Low-income children in the wealthiest nation in the world are disproportionately both victims and perpetrators of crime and in jeopardy relative to health and academic attainment. Families of these youth subsist as a function of their economic status, which creates a cycle of stress that affect the physical and emotional development of children (Annie E. Casey Foundation, 2007; Children's Defense Fund, 2004, 2006a, 2006b; Federal Interagency Forum on Child and Family Statistics, 2007).

To ascertain why it is reasonable for schools and health providers to function as collaborators against the consequences of economically driven child-

hood factors, this discussion begins by considering how risk and resilience manifest themselves in health and learning outcomes.

Rationale

In nations across the globe, educational and health practitioners wrestle with the paradoxes of risk and resilience, particularly in the case of poor youth. Given the time that children spend in school, educators and health staff are well aware of risk manifestations. Unfortunately, the causes of risk are most often outside their control. Thus, although it is useful to be knowledgeable about poverty-based risk factors, a more efficient expenditure of energy would be to apply an understanding of risk to organizational alliances that could promote resilience.

Risk tends to refer to any factor or combination of factors that interfere with optimal development. Risk is not relegated solely to children of low status; presumably, it is universally experienced by children, irrespective of race, ethnicity, gender, religion, socioeconomic status, and sexual preference. When wealthy parents fail to provide a loving, nurturing, and affirming environment, their children are at developmental risk (Brendtro & Longhurst, 2005). Intellectually gifted youngsters are at risk when stifled by unstimulating curricula (Reiss, Colbert, & Hebert, 2005). However, when reflecting on those in greatest jeopardy, one commonly assumes that poor children are exposed to sustained multiple risk factors that forecast academic and health difficulties with higher probability than that of their upper-income counterparts.

Most poor children in the United States, for example, are supported by at least one working caretaker who tends not to possess the full complement of health insurance, access to transportation, and paid leave to ensure youngster's health. As well, health markers of asthma, lead poisoning, and minimal access to care are emblematic of the types of housing that families can afford. In turn, housing location largely determines the type of schools that children attend, and as noted by several sources, poor children are most apt to attend underresourced public schools. Academic outcomes of youth in high-poverty neighborhoods (some of which are manifestations of health issues) also diminish the likelihood that the cycle of poverty will be broken (Annie E. Casey Foundation, 2007; Children's Defense Fund, 2006a, 2006b; Dorn, 2007; Douglas-Hall & Koball, 2006; Fass & Cauthen, 2005; Federal Interagency Forum on Child and Family Statistics, 2007; National Center for Children in Poverty, 2007a, 2007b; National Center for Education Statistics, 2006). Risk is pervasive, and no dimension of a child's life is immune; thus, researchers have called for a holistic approach to its reduction. Furthermore, if children are subjected to one deterrent to development, it is highly likely that they will experience other risk factors concomitantly (Reiss et al., 2005).

Whereas some poor families are fragile entities, others are not. As such, families of similar economic status should not be viewed monoliths, because

despite the challenges of low income, there are those who possess the tenacity to protect youngsters from the consequences of poverty and so promote resilience. For example, some families have demonstrated their ability to “beat the odds” by creating support networks that create a safety net of services for children (Orthner, Jones-Sanpei, & Williamson, 2004). Thus, there is a need to not only acknowledge the inherent strengths that many low-income families demonstrate but also examine the social systems best positioned to promote similar outcomes (i.e., resilience) in children and youth (Orthner et al., 2004).

Each author contributes a piece to the puzzle of resilience predictability by building on a few basic tenets. Common across the generic definitions of resilience is thus: the ability to defy negative predictions as a function of meaningful protective factors or interventions (Jenson & Fraser, 2006). Stated another way, resilience is the ability to (a) overcome adversarial factors that would typically predict failure and (b) survive and recover from trauma (Brooks, 2006; Edwards, Mumford, Shillingford, & Serra-Roldan, 2007; Jenson, 2007; Kitano & Lewis, 2005).

Childhood resilience manifests itself as personal flexibility, adaptability, motivation, social responsibility, and creativity. Institutions, as well as individuals, can nurture resilience through responsive atmospheres and well-run organizations (Mandleco & Perry, 2000). Educational resilience has been defined as “the heightened likelihood of success in school and other life accomplishments despite environmental adversities brought about by early traits, conditions, and experiences” (Reiss et al., 2005, p. 111). Considering health, resilience is a function of culturally sensitive, integrated structural and programmatic processes for children (Mykota & Muhajarine, 2005). All of these definitions and those noted in Table 1 posit at least three ideas in common.

First, a person has to be exposed to a degree of adversity that increases the probability for negative emotional, psychological, social, and/or behavioral outcomes (Bellin & Kovacs, 2006; Brooks, 2006; Kitano & Lewis, 2005; Reiss et al., 2005). Second, the quality of adaptation, or the ability to mitigate the consequences of adversity, varies. And third, protective or resiliency factors deflect negative outcomes (Bellin & Kovacs, 2006; Reiss et al., 2005). In its most inclusive form, “resilience is an ecological phenomenon. It cannot be developed by sheer willpower within the at-risk person; it is developed through interactions within the environment, families, school, neighborhoods, and the larger community” (Brooks, 2006, p. 70).

As indicated in Table 1, resilience has been deemed a dynamic phenomenon rather than a static one (Bellin & Kovacs, 2006; Bernard, 2004; Reiss et al., 2005). Interventions designed to support youth resilience need to take into account that singular interventions and one-size-fits-all programs do not yield the greatest results in children. As youngsters grow and familial needs change, so do the structures needed to nurture resilience.

Race, ethnicity, and socioeconomic status are presumed to impose multiple dimensions of risk (Arrington & Wilson, 2000; Bellin & Kovacs, 2006;

Table 1. Factors Influencing Resilience

<i>Protective Factor</i>	<i>Research</i>
Resilience is influenced by internal and familial attributes	Bellin and Kovacs (2006) Brendtro and Longhurst (2005) Edwards et al. (2007) Kitano and Lewis (2005) Mandleco and Perry (2000) Orthner et al. (2004) Reiss et al. (2005)
Resilience is influenced by relationships, systems, institutions, and programs.	Bellin and Kovacs (2006) Brendtro and Longhurst (2005) Edwards et al. (2007) Mandleco and Perry (2000) Orthner et al. (2004) Reiss et al. (2005)
Protective factors are complex integrative.	Arrington and Wilson (2000) Bellin and Kovacs (2006) Edwards et al. (2007) Mandleco and Perry (2000) Orthner et al. (2004) Vinson (2002)
Resilience is sensitive to gender, race, ethnicity, and socioeconomic status.	Arrington and Wilson (2000) Bellin and Kovacs (2006) Borman and Overman (2004) Orthner et al. (2004) Reimer (2002) Reiss et al. (2005) Renn (2003)
Resilience is sensitive to health.	Mandleco and Perry (2000) Orthner et al. (2004) Vinson (2002)
Strategic support of resilience should take an ecological approach.	Bellin and Kovacs (2006) Bernard (2004) Brooks (2006) Edwards et al. (2007) Reiss et al. (2005)

Borman & Overman, 2004; Orthner et al., 2004; Reimer, 2002; Reiss et al., 2005; Renn, 2003). Unfortunately, potential harm can be translated into predictable failure, and children can be discounted prematurely (i.e., blaming the victim; Arrington & Wilson, 2000; Edwards et al., 2007). This is one inherent danger of continuing discourse around “at-risk youth” and risk factors. However, attention to protective factors is more positive than exclusive attention to frameworks informed by knowledge of risk.

What becomes clear in a survey of the literature is that possessing the capacity to bounce back from challenges typically predictive of failure requires

a combination of personal attributes, positive relationships, and institutional supports. Thus, when used in tandem, internal and external strengths most often aid in overcoming challenges that manifest themselves in dynamic, contextual, and culturally influenced ways. Furthermore, resilience is highly dependent on relationships and programs at the places where children spend the bulk of their time: school and home.

Between studying risk and resilience, researchers have included protective factors as those resources that minimize or mitigate risk. Protective factors can be internal or external to individuals. Individual physiological, emotional, and intellectual characteristics—such as general health, IQ, and coping ability—are considered internal contributors to resilience. Families and other organizations, such as schools and health care agencies, are considered external protective factors (Mandleco & Perry, 2000). Protective factors can also differ on the basis of context. Bearing all these attributes in mind, effective protective factors are the nexus between need and outcome. Different protective factors may insulate youth at one point and be ineffective at other junctures because needs change, children develop, and challenges vary. Table 1 and the combinations cited in the literature help make the case for school–health collaborations being important in building capacity to overcome childhood risk.

As noted earlier in the text, families are pivotal in creating buffers against poverty-based risk. Community relationships can also serve as protective factors that are not sensitive to income. Caring, supportive relationships between adults and youth are affirming to youth and, whether generated in schools, communities, or families, serve as a protective factors (Brooks, 2006; Edwards et al., 2007; Orthner et al., 2004). However, family and general community influence on resilience are, for the most part, outside the locus of school and SBHC control.

If we combine what is known about poverty-based risk with characteristics of resilience, we can see the inefficiency and ineffectiveness of silo interventions. As it pertains to the relationship between health and learning, low-income children with fair or poor health status were 6 times as likely to have a learning disability and 3 times as likely to have attention-deficit/hyperactivity disorder (Bloom & Dey, 2006). School interventions, caused by learning disabilities, for example, have historically been triggered by student failure, as opposed to preventative measures geared toward resilience. School-based services typically become available after risk factors manifest themselves (such as through noncompliant behavior). As it relates to health, the public health community is committed to preventative services; however, many poverty-related safety-net services and other dimensions of low status perpetuate health risk in children (Edwards et al., 2007; Jenson & Fraser, 2006). For example, it is only after a child has been identified as being lead poisoned that certain health and housing supportive services become available (Richardson, 2005). Attention to resilience and the creation of protective partnerships would rep-

resent a paradigm shift to a prevention-based approach, as opposed to waiting until the negative consequences of poverty manifest themselves.

There is ample evidence of the links between health and learning readiness, as well as economic stability and educational attainment, which has fueled calls for multidisciplinary interventions in general and for support of resilience in particular. Noteworthy for purposes of this article are the potential benefits of health and educational partnerships, as exemplified by the following testimony. First, in his article on school health policies and programs, Kolbe (2006) [Q1] writes, “Today, more than ever, school health programs could become one of the most efficient means available to improve the health of our children and their educational achievement” (p. 226). Similarly, in an article concerned with school–community partnerships, Lee-Bayha and Harrison (2002) posit, “The best of teaching cannot always compete successfully with the challenges many students face outside of school” (p. 1). Other authors concur that it is not possible to eliminate health disparities without simultaneously reducing educational attainment disparities (Freudenberg & Ruglis, 2007). Given that economically disenfranchised children are more sensitive than their upper-income counterparts to social systems and their integration, Uri Bronfenbrenner’s ecological model of human development and education (1976, 1979) sets forth a theoretical framework that supports the efficaciousness of schools and health professional partnerships.

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Theoretical Framework

Interactive risk factors influence whether the normal versus disturbed developmental processes ensue. As a result, resilience has been identified as an ecological phenomenon because an ability to surmount challenges is not believed to exist solely within a persona. In addition, because risk and resilience factors do not occur in isolation but perpetually interact, there is a call to think about childhood interventions at critical junctures via an approach inclusive of families, social systems, programs, and communities (Bellin & Kovacs, 2006; Brooks, 2006; Mandleco & Perry, 2000).

The ecology of human development (EHD) framework posited by Bronfenbrenner (1979) has been widely used to explain why some children might be more resilient than others. It has not, however, been pervasively applied to validate the merit of school–SBHC partnerships as a way to improve the lives of children. An ecological approach to resilience in this context presumes certain things: It requires that more than a singular vulnerability factor be at work in a student’s life, and it assumes that interventions at multiple levels (personal, family, community, institutional, and broader society) take place concurrently (Edwards et al., 2007).

Three fundamental concepts undergird the EHD framework. First, the EHD model asserts persons as dynamic entities upon whom environments exert influence. Second, individuals and their environment reciprocally

interact, thereby creating a need to accommodate each other in the developmental process. Third, environments and developmental processes are not one-dimensional but rather extend between settings, emanating from narrow to broad contexts (Bronfenbrenner, 1979). Each of these assumptions aligns with the characteristics of protective factors and resilience already discussed. Concentric circles representing micro-, meso-, exo-, and macrosystems are most often used to represent the perpetual interaction of multiple contexts (see Figure 2.1).

Central to development are child–adult relationships formed as one-on-one exchanges that occur between youth and significant others, such as parents and teachers. Microsystems (i.e., one-on-one exchanges) take place in settings such as homes, day cares, and schools, and they occur where childhood experiences influence development (Bronfenbrenner, 1976, 1979; Mertensmeyer & Fine, 2000).

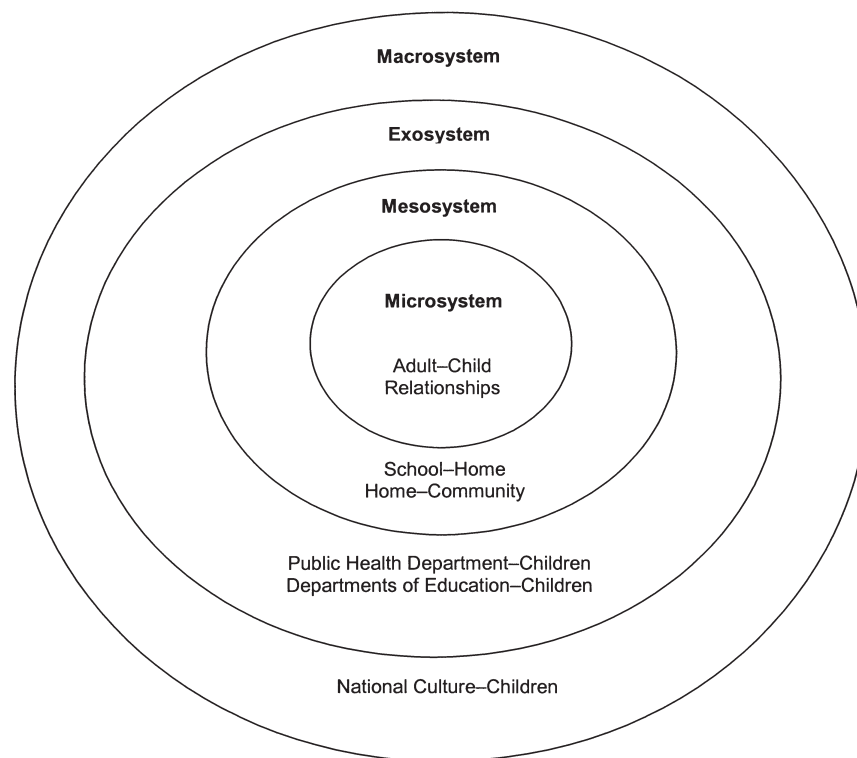


Figure 2.1. Ecology of Human Development

Source. Adapted from Brendtro (2006) and Bronfenbrenner (1976, 1979).

Interrelations between two or more settings, such as home and school, home and community organizations, are criteria for mesosystemic influence. In schools, a developing child is forced into a new setting, requiring an adjustment to new norms, behaviors, and expectations. Mesosystems, like microsystems, are settings where children spend most of their time. By virtue of the hours spent in school, for example, opportunities exist to foster relationships and implement interventions that shape early learning, health, and behavior (Mertensmeyer & Fine, 2000). Another way to conceptualize a mesosystem would be to envision a network of microsystems (Bronfenbrenner, 1979).

Settings that extend their influence to a child but do not directly involve the child are considered exosystems (Bronfenbrenner, 1979). Formal social welfare agencies charged with distributing resources and dictating practices in schools and public health departments at the federal, state, or local level are examples (Brendtro, 2006; Bronfenbrenner, 1976; Renn, 2003). As another example, school policies requiring health screenings and designating subjects to be taught affect development; however, their creation and implementation take place without interaction with individual youngsters.

Finally, a macrosystem speaks to the larger culture that heavily influences all other systems. For example, the global economy, a national culture, and the belief systems and ideologies that support them indirectly influence exo-, meso-, and microsystems (Brendtro, 2006; Bronfenbrenner, 1976, 1979; Renn, 2003).

All systems, depicted as concentric circles, simultaneously impose pressure on youth as they develop. Individual maturation and transition occur normally and naturally as a function of interaction between and among these systems; as such, the EHD model proves its utility as a heuristic approach in light of the influence of risk and protective factors on resilience. Risk—or in Bronfenbrenner’s vernacular, disruptive ecologies—manifests itself in many ways. Reaction to these disruptions create “dis-ease” with the environment (Brendtro, 2006; Bronfenbrenner, 1976). Terminology selected in this framework rejects the notion that children possess deficits; rather, children respond to deficits in the various dimensions of their environment. Transactions occur among children, adults, and systems that create behavioral, health, and developmental patterns that facilitate normal development or thwart normal patterns. Given our focus on resilience, disruptions to developmentally sensitive interactions create risk that creates a need for protective factors to counteract them.

Application of a resiliency lens to the EHD framework would posit the following: “The most powerful interventions with children and youth are those that seek to build a supportive ecology around a child” (Brendtro, 2006, p. 165). As it applies to Bronfenbrenner’s work, the problem with risk and resilience is not so much a child-based problem as it is a need to introduce

protective factors into high-risk ecologies. Applied to education, Bronfenbrenner (1976) noted,

Whether and how people learn in educational settings is a function of sets of forces, or systems, at two levels: a. The first comprises the relations between the characteristics of the learners and the surroundings. . . . b. The second encompasses the relations and interconnections that exist between these environments. (p. 5)

That said, schools and the services offered within them are prime locales for protective interventions.

This text begins by making the argument that children of poverty are in great need of systemic interventions that support optimal learning readiness and health because their families do not command as many resources as do their upper-income counterparts. With poor and near-poor children most apt to being uninsured or underinsured, not having access to care, and attending schools that lack requisite resources, partnerships hold the possibility of building shields around childhood potential via micro-, meso-, and exosystems.

SBHCs and Schools Promoting Resilience Together

Risk, protective factors, and resilience coexist on the life continuum of a child, exerting pressures on him or her to adapt to circumstances. Mental and physical health, social, emotional, and cognitive development are also influenced by various systems, programs, and institutions (Hair, Halle, Terry-Humen, Lavell, & Calkins, 2006; Jenson & Fraser, 2006). One of the dangers of yet another article about risk is that for the most part, public health and educational professionals have no control over childhood risk factors, such as income, race, family stability, and community resources. They do, however, have the capacity to construct targeted collaborative interventions that bolster resilience by providing holistic services, as would be supported by the EHD framework. A pertinent question to pose at this juncture is why, given the many responsibilities that schools and SBHCs manage, should they consider collaborating formally around resilience?

Rationale for forging collaborative health–education resilience partnerships is rooted in the vulnerability of poor and near-poor children to government supported systems, programs, and services. In addition, researchers concur that educational attainment and health are perhaps the greatest capital sources in breaking the cycle of poverty-induced disadvantage (Freudenberg & Ruglis, 2007). In an international context, poor health has been confirmed to influence low school enrollment, absenteeism, poor classroom performance, and early school dropouts.

Although no singular pathway unequivocally destines economically deprived youth to school failure and poor health, the focus on institutional

dimensions of resilience is most appropriate given the mission of schools and the contact hours involved. Academic organizations, health facilities, and community organizations have been identified as being pivotal to resilience, relative to two dimensions: formal programming and adult-child relationships (Edwards et al., 2007). Institutions such as schools are examples of organizations that, by virtue of their mission and location, have high contact with “at-risk” youth and can directly and indirectly serve as a protective factor.

Furthermore, schools tend to be one of the last institutions that all communities have in common and so are a most logical place to provide health services. Ninety percent of school-aged children in the United States attend publicly funded schools and, as such, are the one place that children dependably convene. Furthermore, the relationship between health and learning readiness is fluid and reciprocal. The Foundation for Child Development indicates that good health, cognitive and literacy skills, and motivation are key predictors of academic achievement and that childhood access to health services is crucial to facilitating transition to productive adulthood (Takani-shi, 2004). According to Freudenberg and Ruglis (2007), education is one of the strongest predictors of health and economic stability; conversely, health exerts direct and indirect effects on degree attainment. This may be why some researchers have suggested that schools develop partnerships with families, communities, and other entities to facilitate a resilient environment for youth, based on the premise that schools and school-linked services such as SBHCs can promote early protective interventions in an effective, efficient culturally relevant way (Dryfoos, 2006).

Provision of health services in schools, particularly in low-income communities, is not a new concept. Several programs are in various stages of implementation in numerous countries (e.g., Benin, Mozambique, Sierra Leone) and are tied to international nongovernmental organization initiatives. In the United States, there are over 1,500 SBHC facilities. As a result, the significant cross-section of organizations invests in school-based and school-linked health facilities as part of their commitment to basic education quality (UNESCO, 2002, 2007).

For example, the FRESH programs (Focusing Resources on Effective School Health) are supported by a partnership among UNESCO, UNICEF, the World Health Organization, the World Bank, the World Food Programme, the Partnership for Child Development, Education International, and Save the Children US. The FRESH framework focuses on health-related school policies, safe water, and sanitation; skills-based health and nutrition education; and access to health and nutrition services. Much like U.S.-based SBHCs, services are determined by local communities and are supported by school-community-health partnerships, with schools as the service delivery sites (United Nations System Standing Committee on Nutrition, 2002).

An initial barrier to the proliferation of school-health partnerships in the United States is the educational community’s unfamiliarity with SBHCs. As

such, SBHCs are created as collaboratives among schools, a health organization, and community. They do not take the place of a school nurse; rather, they expand the health services that are available to children, going beyond the authorized scope of school nurse duties. Models of care and the personnel on site who deliver services are dictated by the needs and priorities of idiosyncratic communities, the school site, and the health organization that is supporting the enterprise. Services are age appropriate and can include, but are not limited to, primary care for acute and chronic conditions (such as asthma, diabetes, and on-site injuries), nutrition education, health education, mental and dental health services, and substance abuse services (Juszczak, Schlitt, Odum, Barangan, & Washington, 2006; National Assembly on School-Based Health Care, 2002).

Given the sensitivity to community priorities, policies on parental consent, diverse funding structures, grade level, and site location (elementary, middle, or high school), it is difficult to find two identical SBHCs. That said, the aforementioned definition tends to hold true for the roughly 1,500 sites across the country (Juszczak et al., 2006; National Assembly on School-Based Health Care, 2002).

Relative to converting risk to resilience, SBHCs can be immensely helpful, particularly if children are economically challenged or live in regions underserved by the traditional medical establishment. In partnership with schools, health programs such as SBHCs could have a profound effect on learning outcomes as well, which include (but are not limited to) poor concentration in school, attendance, and disturbances of normal sequential cognitive development. These facilities located in schools are already beginning to prove their impact as attendance rates and seat time increase and children learn to manage their chronic illnesses (Lear, 2006, 2007). Citing the millions of school days missed annually for health reasons, findings from UNESCO confirm that good health is essential if children are to take advantage of formal learning. An ability to learn and even attend school is compromised by illness that could be mitigated if health services are accessible, and it is logical to consider schools as a location for not only learning but also implementing preventative health interventions (UNESCO, 2002).

Additional rationale for collaboration can be found in the similarities between schools and SBHCs—for example,

- predictors of poor health are also precursors to educational risk;
- both the school and the SBHC need community support and buy-in to optimize their potential as institutions; and
- relative to the EHD framework, both can contribute to resilience when they function as protective institutions.

Taking the potential power of school–SBHC partnerships further, Figure 2.2 reflects how SBHCs and school can serve as proactive factors to fiscally

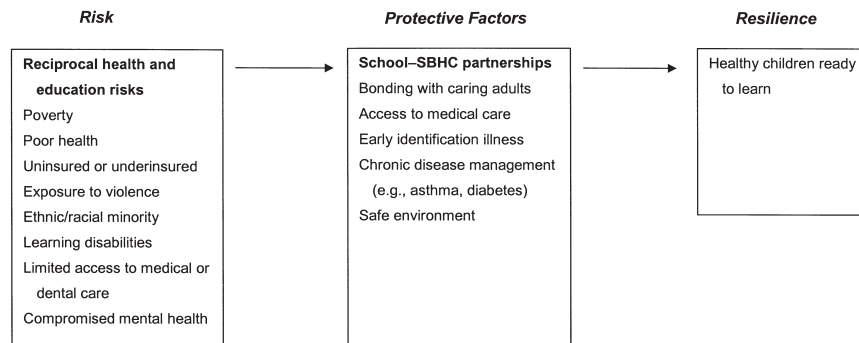


Figure 2.2. From Risk to Resilience

Adapted from Geierstanger, Amaral, Mansour, and Walters (2004); Richardson (2007); Rounds and Ormsby (2006).

Note. SBHCs = school-based health care sites.

mitigate sensitive disadvantage. As noted earlier, Jenson and Fraser (2006) suggest that resilience be viewed on a continuum.

Children experiencing one or more risk factors manifest school-related difficulties in different ways, such as low test scores, struggles with reading, high dropout rates, minimal academic motivation, and disruptive behavior, to name a few examples. Sometimes, however, these academic markers are indicators of health-related problems.

As it pertains to the nexus between health and poverty, again we see the tentacles of multiplied disadvantage. Low income increases the likelihood that youth will not be insured, see a dentist, and have to use emergency rooms as treatment sites. These same health issues trickle into schools and so manifest themselves in learning disabilities, short attention spans, poor attendance, and academic performance.

Consider one childhood disease sensitive to income that has direct and indirect implications to school performance that SBHCs could mitigate. Over 6 million youth have been diagnosed with asthma in the United States. When income affects the treatment of asthma, youth are more apt to be seen in emergency rooms with severe attacks. Those who cannot control their asthma experience sleep disruption that deters attentiveness in school. Asthmatic children have rates of grade failure higher than those of nonasthmatics. When compared with children who are well, children who have asthma have almost twice the rate of learning disabilities (Diette et al., 2000; Fowler, Davenport, & Garg, 1992). Asthma, in addition to contributing to exorbitant health care costs (because preventative care is far less expensive than hospital treatment), causes over 6 million days of school absences (Wang, Zhong, & Wheeler, 2005). In just this example, the protective presence of an on-site SBHC would not only improve health outcomes but also influence learning readiness.

Reflections and Recommendations

Numerous factors create risk in youth; however, if resilience is to be facilitated, careful attention should be paid to services and partnerships that can serve as buffers. According to Bronfenbrenner's EHD model (1976, 1979), systems can do much to alleviate the "dis-ease" that children face as they mature. Applying his theoretical framework further, interventions to mitigate risk and encourage resilience relative to child health and learning should rely more on systemic adjustments than on the individual characteristics or traits of children and their families.

Until now, much focus has been paid to risk as a predictor of child performance and potential. Concerted attention to risk and negative outcomes prompts a deficit-based intervention paradigm (Edwards et al., 2007). Although knowledge of risk and resilience do appear to have influenced educational and health practice, they do not appear to have prompted widespread integrated collaborative partnerships that foster resilience in children.


Coalitions between health (e.g., SBHCs and FRESH programs) and education have the potential to radically improve the lives of children. However, such partnerships and initiatives should not be construed as superficial measures, because in the short term they will not optimally support child development (Brooks, 2006). Protective strategies should include comprehensive services and sufficient dosages of interventions with sufficient intensity, and they should be socioculturally relevant and implemented by well-trained staff (Edwards et al., 2007; UNESCO, 2002).

Despite the proliferation of SBHCs across the United States and despite that of their international counterparts, the potential of the SBHC to meaningfully serve as a protective institution and its demonstrable impact on school accountability measures (such as attendance) are largely undocumented with quantified data. Intuitively and anecdotally, SBHC-school partnerships are an excellent model of a resilience partnership. The work of Dryfoos and others (Dryfoos, 2002, 2005; Kline, Silver, & Russell, 2001) indicate that locating SBHCs in schools is a more efficient and effective strategy to meet the health and mental health needs of little ones. FRESH was similarly founded on these principals. However, these calls are not yet grounded in replicated empirical studies. Many educational decision makers are unaware of SBHCs as a mode of health care, at least partially because of the need for more research. As such, I suggest the following areas be explored further: the relationships between and among dimensions of child health and learning in general and the efficacy of school-SBHC partnerships in particular. Shifting programmatic foci and empirical investigations to protective partnerships could quantify benefits of protective institutional interventions for economically challenged youth.

Even without pervasive quantified data, the proposed partnership is well grounded in intuition, anecdote, and theory. Healthy children are better prepared to learn and, as a result, are poised to grow into productive and healthy

adults. The influence of health on learning—and education on health—is inseparable. Children do not leave stressors to well-being in their homes, and unwelcome classmates of hunger, illness, and disadvantage occupy seats in classrooms in wealthy nations such as the United States and emerging nations as well. In the absence of purposeful, integrated interventions, childhood potential languishes. Picture instead the power of a key unlocking the door of economically driven “dis-ease” in children—institutional alliances between schools and SBHCs or similar institutions. Perhaps this theme is best articulated by the UNICEF’s Voices for Youth website: “Improving education [and, by inference, health] isn’t just a question of getting more children into school. It’s also about what happens to you while you’re there.”

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